

## A B S T R A C T

The invention relates to a method of interactively  
5 simulating contact between objects. The inventive method  
comprises the following steps, namely: the parameters  
describing the physical characteristics of each of the objects  
are computed; at the beginning of each simulated model  
sampling time step, each object is subjected to a real-time  
10 analysis of the specific behavior thereof according to a free  
movement that does not take account of possible subsequent  
contacts, and, subsequently, at an overall scene level, pairs  
of detected intersecting objects are subjected to real-time  
analysis; a list of collision groups is established; for each  
15 collision group, parameters representing the physical  
characteristics of the objects and the description of the  
collisions are repatriated in real time, to characterize the  
contact between two objects in the case of a pure relative  
sliding movement; and, for each object, the specific behavior  
20 of the object following the collision is displayed in real  
time and the set of real-time processes is performed with a  
calculation time step shorter than the sampling time step.